Virginia Title V Operating Permit

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Vaughan Furniture Company, Inc.
Facility Name:	B.C. Vaughan Plant
Facility Address:	Creekview Drive, Galax, VA
DEQ Registration No:	10443
Permit Number:	SWRO10443
Effective Date:	September 13, 2006
Expiration Date:	September 12, 2011

Michael D. Overstreet, Regional Director Department of Environmental Quality Signature Date: September 13, 2006

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I. Facility Information

Permittee

Vaughan Furniture Company, Inc. P.O. Box 1489 Galax. VA 24333

Responsible Official/Contact person

Taylor C. Vaughan Senior Executive Vice President (276) 236-6111

Contact Person

Grant DeZern
First V.P. Safety/Product/Environmental Quality
(276) 238-3200

Facility

B.C. Vaughan Plant (including the Chestnut Creek Veneer Plant) Creekview Drive, Galax, VA

AFS Identification Number: 51-640-00018

Facility Description: SIC 2511 - Wood Household Furniture, Except Upholstered

Vaughan Furniture Company manufactures wooden furniture (case goods) from raw lumber at their B.C. Vaughan Plant, in Galax, Virginia. The Chestnut Creek Veneer Plant is also located on site and is under common ownership with the B.C. Vaughan Plant. The Chestnut Creek Plant provides veneering services to the B.C. Vaughan Plant, as well as to other Vaughan Furniture plants located in Galax.

Raw lumber is delivered by truck and allowed to dry in the open air for several weeks. The lumber is then placed in one of the six kilns located on site for approximately two weeks to reduce the wood moisture content. The dried lumber is passed through various sawing, planing, sanding, and gluing operations to produce the desired furniture components. Four fabric filters are used to control particulate emissions from the various pieces of woodworking equipment.

There are two boilers on site – one 28 mmBtu/hour Bigelow Type B water tube wood/coal-fired boiler and one 20 mmBtu/hour Nebraska water tube wood-fired boiler. The boilers produce steam, which is used to heat the kilns and drying ovens on the finishing line. Wood scraps generated by the woodworking equipment provide the fuel for the boilers. Multicyclone collectors control particulate emissions from each of the boilers.

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Gluing operations are conducted throughout the manufacturing process. Adhesives are used in furniture assembly, attaching chipboard and plywood backings, panel veneering, rimming and edging, laminating, and furniture repair. The various adhesives may be applied by brushing, spraying, cold presses, roll coaters, hot presses, or applied directly from its container.

After the furniture components are assembled, they are conveyed to the finishing area, where multiple coatings are applied to produce the desired color and luster. The coatings may be applied using a variety of methods including hand wiping, brushing, spraying, flat line printing, roll coating, silkscreen printing, stenciling, dipping, and curtain coating. The ten spray booths on the finishing line incorporate both HVLP (high volume/low pressure) and airless spray guns to apply the fillers, wood preservatives, stains, toners, glazes, washcoats, sealers, and lacquers. Finishing operations also include the drying and curing of the coatings by air drying (flash-off) and heat (ovens). Spray cans of various coatings are used at numerous locations on the finish line for minor touchups and repairs. For more severe finish flaws, a wash-off (stripping) material may be used to remove all of the finish from the furniture so that it may be passed through the finishing line again.

Particulate emissions from the finishing line are controlled by water pan, fabric, and/or paper filters. There are no volatile organic compound (VOC) emission control devices.

Woodworking operations at the Chestnut Creek Veneer Plant include a drop clipper area, joint area, and two glue spray booths.

Emission sources at the facility include the two boilers, the woodworking operations, and the finishing operations.

The facility is a Title V major source of VOC and total hazardous air pollutant (HAP) emissions. This source is located in an attainment area for all criteria pollutants. The Bigelow boiler and the operations at the Chestnut Creek Veneer Plant are permitted under a NSR permit dated November 18, 2005.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
	ing Equipme		Оараску	Description	1 00 10	Controlled	1 chill bate
B1	B1	Bigelow Type B Water Tube Wood/Coal-Fired Boiler (Constructed prior to June 1989)	28 mmBtu/hr	(2) Multicyclones in series	CD-MC1	Particulate	NSR permit issued 11/18/2005
B2	B2	Nebraska Water Tube Wood-Fired Boiler (Constructed prior to June 1989)	20 mmBtu/hr	Multicyclone	CD-MC2	Particulate	-
Woodwor	king Equipn	nent					
	-		-	Carter-Day Baghouse	CD-BH1	Particulate	-
	-		-	Carter-Day Baghouse	CD-BH2	Particulate	-
W1	-	All woodworking equipment including saws, sanders, jointers, etc.	-	Donaldson-Day Baghouse	CD-BH3	Particulate	-
	-		-	Donaldson-Day Baghouse	CD-BH4	Particulate	-
Gluing Op	erations (CI	hestnut Creek Veneer Plant)					
ST1-G1 ST2-G2	E-1 E-2	(2) Virginia Blower Glue Spray Booths	-	Fabric Filter	-	Particulate	NSR permit issued 11/18/2005
Finishing	Finishing Operations						
F1	A, A1, B, D, J, K, M, N, P/Q, R/S, T, V, Y	Finishing line exhaust stacks	197,000 acfm	Fabric filter on R/S	ST11-F1	Particulate	-

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Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
SB100		Wood-coating spray booth	15,000 acfm			Particulate	NSR permit issued 11/18/2005

III. Fuel Burning Equipment (Emission Unit ID No.'s B1 & B2)

A. Limitations

- Particulate emissions from the Bigelow Type B wood/coal-fired boiler (B1) shall be controlled by two (2) Barron Base III-9 multicyclone collectors in series, or equivalent. The collectors shall be provided with adequate access for inspection. (9 VAC 5-50-260, 9 VAC 5-80-110 B and Condition 3 of the NSR permit issued November 18, 2005)
- 2. The approved fuels for the Bigelow Type B wood/coal-fired boiler (B1) are wood waste and bituminous coal. A change in the fuels may require a permit to modify and operate.
 - (9 VAC 5-80-10H, 9 VAC 5-80-110 B, and Condition 9 of the NSR permit issued November 18, 2005)
- 3. The Bigelow Type B wood/coal-fired boiler (B1) shall consume no more than 1,000 tons of coal and 6,000 tons of wood waste per year, calculated as the sum of each consecutive twelve month period.

 (9 VAC 5-80-10H, 9 VAC 5-80-110 B, and Condition 10 of the NSR permit issued
 - (9 VAC 5-80-10H, 9 VAC 5-80-110 B, and Condition 10 of the NSR permit issued November 18, 2005)
- 4. The average ratio of the heat and sulfur contents of each shipment of coal to be burned in the Bigelow Type B wood/coal-fired boiler (B1) shall be maintained such that the following equation is valid:

Coal Heat Content (Btu/lb, dry basis)

Coal Sulfur Content (lbs of Sulfur per 100 lbs of Coal, dry basis)

≥ 16,250

(9 VAC 5-80-10 H, 9 VAC 5-80-110 B, and Condition 11 of the NSR permit issued November 18, 2005)

5. Emissions from the operation of the Bigelow Type B wood/coal-fired boiler (B1) shall not exceed the limitations specified below:

Particulate Matter (PM)	0.30 lbs/10 ⁶ Btu	17.37 tons/yr
PM-10	7.56 lbs/hr	15.93 tons/yr
Sulfur Dioxide	1.20 lbs/10 ⁶ Btu	17.54 tons/yr
Volatile Organic Compounds	0.49 lbs/hr	0.86 tons/yr
Nitrogen Dioxide	14.56 lbs/hr	30.52 tons/yr
Carbon Monoxide	23.80 lbs/hr	43.30 tons/yr

Annual emissions are to be calculated as the sum of each consecutive twelve month period.

(9 VAC 5-50-260, 9 VAC 5-80-110 B, and Condition 12 of the NSR permit issued November 18, 2005)

6. Emissions from the operation of the Nebraska wood-fired boiler (B2) shall not exceed the limitations specified below:

Particulate Matter (PM) 0.50 lbs/10⁶ Btu (as fired)

Sulfur Dioxide 52.8 lbs/hr (9 VAC 5-40-900, 9 VAC 5-40-930, and 9 VAC 5-80-110 B)

- 7. Visible emissions from the Bigelow Type B wood/coal-fired boiler (B1) exhaust shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 27 percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction. (9 VAC 5-50-260, 9 VAC 5-80-110 B, and Condition 15 of the NSR permit issued November 18, 2005)
- 8. Visible emissions from the Nebraska wood-fired fired boiler (B2) exhaust shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
 (9 VAC 5-40-940, 9 VAC 5-40-20, and 9 VAC 5-80-110 B)

B. Monitoring and Recordkeeping

1. The permittee shall perform visible emissions observations on the Bigelow Type B wood/coal-fired boiler (B1) and the Nebraska wood-fired boiler (B2) stacks at least once each week during normal facility operation. Each visible emissions observation shall be performed for a sufficient period of time to identify the presence of visible emissions. If visible emissions do not appear to exceed ten percent (10%) opacity, no action shall be required. However, if the observed visible emissions appear to exceed 10% opacity, a visible emission evaluation (VEE) shall be conducted using 40 CFR Part 60, Appendix A, Method 9 for a period of not less than 6-minutes. If the average opacity exceeds 20%, modifications and/or repairs shall be performed to correct the problem and the corrective measures shall be recorded. If such corrective action fails to remedy the opacity problem, a VEE in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be performed for a period of at least 18 minutes to determine compliance with the opacity limits specified in Conditions III.A.7 and III.A.8 of this permit. The visible emissions observer shall be Method 9 certified. (9 VAC 5-80-110 K)

- A record of each visible emissions observation shall be maintained and shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer.
 (9 VAC 5-80-110 K)
- 3. At least one VEE in accordance with 40 CFR 60 Appendix A, Method 9 shall be performed on both the Bigelow Type B wood/coal-fired boiler (B1) and the Nebraska wood-fired boiler (B2), during each calendar year, to show compliance with the opacity limits in Conditions III.A.7 and III.A.8. Any VEE performed to meet the requirements of Condition III.B.1 of this permit, will satisfy this requirement for that calendar year.
 (9 VAC 5-80-110 K)
- C. Compliance Assurance Monitoring (CAM) Requirements
 - 1. The permittee shall monitor, operate, calibrate and maintain the multicyclones (CD-MC1 and CD-MC2) controlling the Bigelow boiler B1 and Nebraska boiler B2 according to the following:

Monitoring, Frequency, Records	Performance Criteria	Indicator Range; Averaging Period
Monitor multicyclone pressure drop readings daily. Record results daily.	Observe deviation from normal pressure drop of 0.2" w.c.< Dp < 9.5" w.c.	Pressure drop from instantaneous observation of magnehelic gauge or equivalent is no more than 10% below 0.2" w.c.< Dp < 9.5" w.c.
External cyclone inspections, when pressure drop is outside the indicator range. Internal cyclone and ductwork inspection as required to alleviate any flow problems.	Inspections by a qualified employee with at least one year of experience in maintenance of mechanical equipment.	As noted above.
Maintenance logs of all maintenance activities as required by manufacturer's specifications; conduct annual maintenance activity.	A qualified employee with at least one year of experience in maintenance of mechanical equipment.	Logs maintained and available for inspection on a daily basis or as requested.

(9 VAC 5-80-110 and 40 CFR 64)

 The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
 (9 VAC 5-80-110, 9 VAC 5-80-490 E and 40 CFR 64.6 (c)) At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(9 VAC 5-80-110, 9 VAC 5-80-490 E and 40 CFR 64.7 (b))

4. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the Bigelow boiler B1 and Nebraska boiler B2 are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.

(9 VAC 5-80-110, 9 VAC 5-80-490 E and 40 CFR 64.7 (c))

5. Upon detecting an excursion or exceedance, the permittee shall restore operation of the Bigelow boiler B1 and Nebraska boiler B2 (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.

(9 VAC 5-80-110, 9 VAC 5-80-490 E and 40 CFR 64.7 (d)(1))

 Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(9 VAC 5-80-110, 9 VAC 5-80-490 E and 40 CFR 64.7(d)(2))

7. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Southwest Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(9 VAC 5-80-110, 9 VAC 5-80-490 E and 40 CFR 64.7(e))

- 8. If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the Bigelow boiler B1 and Nebraska boiler B2 for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
 - a. Improved preventative maintenance practices;
 - b. Process operation changes;

November 18, 2005)

- c. Appropriate improvements to control methods;
- d. Other steps appropriate to correct control performance; and
- e. More frequent or improved monitoring.
- (9 VAC 5-80-110, 9 VAC 5-80-490 E and 40 CFR 64.8(a) and (b))
- 9. The permittee shall maintain records of all coal shipments purchased, indicating the name of the coal supplier, sulfur, moisture, and heat content (Btu/lb) per shipment. The records shall also indicate the methods used in the coal analysis and the location (mine, seam, or storage facility) of the coal when sampled. These records shall be kept on file for the most current five (5) year period and shall be available on site for inspection by DEQ personnel.
 (9 VAC 5-170-160, 9 VAC 5-80-110 B, and Condition 11 of the NSR permit issued
- 10. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to: the tons of wood and coal combusted in the Bigelow Type B wood/coal-fired boiler (B1) on a daily, monthly,

and annual basis; the tons of wood combusted in the Nebraska wood-fired boiler (B2) on a monthly and annual basis; and the pollutant specific emission factors (F-factors) and equations used to calculate actual emission rates from each of the boilers (B1 and B2). Tons per year consumption and emissions are to be calculated as the sum of each consecutive 12 month period. These records shall be kept on file for the most current five (5) year period and shall be available on site for inspection by DEQ personnel.

(9 VAC 5-40-50, 9 VAC 5-50-50, 9 VAC 5-80-110 B, and Condition 17 of the NSR permit issued November 18, 2005)

D. Testing

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Regulated Pollutant	Reference Method
VOC	EPA Methods 18, 25, 25a
NO _X	EPA Method 7
SO ₂	EPA Method 6
CO	EPA Method 10
PM/PM ₁₀	EPA Method 5
Visible Emissions	EPA Method 9

The Department and EPA have the authority to require testing not included in this permit, if necessary to determine compliance with an emission limit or standard. (9 VAC 5-80-110)

IV. MACT Conditions - Fuel Burning Equipment (Emission Unit ID No.'s B1 & B2)

The Maximum Achievable Control Technology (MACT) Standard for industrial boilers, under 40 CFR 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters), and 9 VAC 5 Chapter 60, was proposed on January 13, 2003, and promulgated on September 13, 2004. The MACT standard is applicable to this facility for the existing B1 and B2 boilers per 40 CFR 63.7475, 40 CFR 63.7485, and 40 CFR 63.7490 (d).

A. Compliance Times and Limited Requirements

For existing large boilers and process heaters, the permittee shall comply with 40 CFR 63, Subpart DDDD by September 13, 2007.
 (9 VAC 5-80-110 and 40 CFR 63.7495)

B. Emission Limits, Work Practice Standards, and Operating Limits

- 1. For existing large boilers and process heaters, the permittee shall meet each emission limit and work practice standard in Table 1 to Subpart DDDDD that applies to the wood-fired boilers, except as provided under 40 CFR 63.7507. (9 VAC 5-80-110 and 40 CFR 63.7500 (a) (1))
- 2. For existing large boilers and process heaters, the permittee shall meet each operating limit in Tables 2 through 4 to Subpart DDDDD that applies to the wood-fired boilers. If the permittee uses a control device or combination of control devices not covered in Tables 2 through 4 of Subpart DDDD, or if it is desired to establish and monitor an alternative operating limit and alternative monitoring parameters, the permittee must apply to the United States Environmental Protection Agency (EPA) Administrator for approval of alternative monitoring under 40 CFR 63.8(f).
 - (9 VAC 5-80-110 and 40 CFR 63.7500 (a) (2))
- 3. For existing large boilers and process heaters, as specified in 40 CFR 63.6 (g), the EPA may approve use of an alternative to the work practice standards in Table 1 of Subpart DDDDD.
 - (9 VAC 5-80-110 and 40 CFR 63.7500 (b))

C. General Compliance Requirements

- 1. The permittee shall be in compliance with the emission limits (including operating limits) and the work practice standards in 40 CFR 63, Subpart DDDDD, at all times, except during periods of startup, shutdown, and malfunction.
 - (9 VAC 5-80-110 and 40 CFR 63.7505 (a))
- 2. The permittee shall always operate and maintain the affected facility, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(e)(1)(i).
 - (9 VAC 5-80-110 and 40 CFR 63.7505 (b))
- The permittee shall demonstrate compliance with any applicable emission limit using fuel analysis if the emission rate calculated according to 40 CFR 63.7530(d) is less than the applicable emission limit. Otherwise, compliance must be demonstrated using performance testing.
 - (9 VAC 5-80-110 and 40 CFR 63.7505 (c))
- 4. The permittee shall demonstrate compliance with any applicable emission limit through performance testing, by developing a site-specific monitoring plan according to the requirements in 40 CFR 63.7505 (d)(1) through (d) (4). This requirement shall also apply if the permittee petitions the EPA Administrator for alternative monitoring parameters under 40 CFR 63.8(f).
 - (9 VAC 5-80-110 and 40 CFR 63.7505 (d))

5. For an applicable emission limit or work practice standard, the permittee shall develop and implement a written startup, shutdown, and malfunction plan (SSMP) in accordance with 40 CFR 63.6(e)(3).

(9 VAC 5-80-110 and 40 CFR 63.7505 (e))

D. Compliance Alternatives

1. If applicable, the permitte shall demonstrate eligibility for the health-based compliance alternative for HCI emissions in accordance with procedures in Appendix A, 40 CFR 63, Subpart DDDDD.

(9 VAC 5-80-110 and 40 CFR 63.7507 (a))

E. Testing, Fuel Analyses, and Initial Compliance Requirements

1. The permittee shall conduct testing, fuel analyses, and meet initial compliance requirements for the wood-fired boilers in accordance with 40 CFR 63.7510 (a), (b), (c), and (d).

(9 VAC 5-80-110 and 40 CFR 63.7510)

2. The permittee shall conduct subsequent performance tests or fuel analyses for the wood-fired boilers in accordance with 40 CFR 63.7515. (9 VAC 5-80-110 and 40 CFR 63.7515)

3. The permittee shall follow procedures in 40 CFR 63.7520 (a), (b), (d), (e), (f) and (g) for completion of performance tests. (9 VAC 5-80-110 and 40 CFR 63.7520)

4. The permittee shall follow procedures in 40 CFR 63.7521 for completion of fuel analysis tests.

(9 VAC 5-80-110 and 40 CFR 63.7521)

5. If applicable, as an alternative to meeting requirements in 40 CFR 63.7500, the permittee shall demonstrate compliance by emission averaging in accordance with procedures in 40 CFR 63.7522.

(9 VAC 5-80-110 and 40 CFR 63.7522)

6. The permittee shall demonstrate initial compliance with emission limits and work practice standards as applicable in accordance with 40 CFR 63.7530. (9 VAC 5-80-110 and 40 CFR 63.7530)

F. Continuous Compliance Requirements

1. The permittee shall monitor and collect data to demonstrate continuous compliance in accordance with 40 CFR 63.7535.

(9 VAC 5-80-110 and 40 CFR 63.7535)

- 2. The permittee shall demonstrate continuous compliance with the emission limits and work practice standards in accordance with procedures in 40 CFR 63.7540. (9 VAC 5-80-110 and 40 CFR 63.7540)
- If applicable, the permittee shall demonstrate continuous compliance with the emission provision in accordance with procedures in 40 CFR 63.7541.
 (9 VAC 5-80-110 and 40 CFR 63.7541)
- G. Notification, Reports, and Records
 - 1. The permittee shall submit notifications in accordance with 40 CFR 63.7545 (a), (b) (1), (d), (e)(1) (7) and (9).

(9 VAC 5-80-110 and 40 CFR 63.7545)

2. The permittee shall submit the applicable required reports by the applicable due dates in accordance with 40 CFR 63.7550.

(9 VAC 5-80-110 and 40 CFR 63.7550)

3. The permittee shall keep and maintain records in accordance with applicable requirements in 40 CFR 63.7555 and 40 CFR 63.7560.

(9 VAC 5-80-110, 40 CFR 63.7555, and 40 CFR 63.7560)

4. The permittee shall apply General Provisions of this chapter in accordance with Table 10 of 40 CFR 63, Subpart DDDDD.

(9 VAC 5-80-110 and 40 CFR 63.7565)

V. Woodworking Equipment (Emission Unit ID No. W1)

A. Limitations

 Particulate matter emissions from the operation of the various woodworking processes (W1) at the facility, as exhausted from each of the two (2) Carter Day fabric filters (CD-BH1 & CD-BH2) and the two (2) Donaldson Day fabric filters (CD-BH3 & CD-BH4) shall not exceed 0.05 grains per standard cubic foot of exhaust gas.

(9 VAC 5-40-2270 and 5-80-110 B)

2. Visible emissions from each baghouse exhaust (CD-BH1, CD-BH2, CD-BH3, & CD-BH4) shall not exceed 20 percent opacity, except for one six-minute period in any one hour of not more than 60 percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).

(9 VAC 5-40-2280, 9 VAC 5-40-20, and 5-80-110 B)

B. Monitoring and Recordkeeping

- 1. The permittee shall perform visible emission observations on the each of the four baghouses (CD-BH1, CD-BH2, CD-BH3, & CD-BH4). The visible emissions observations shall be conducted at least once each week during periods of normal facility operation for a sufficient time period to determine the presence of any visible emissions. If no visible emissions are observed, no action shall be required. . If visible emissions do not appear to exceed ten percent (10%) opacity, no action shall be required. However, if the observed visible emissions appear to exceed 10% opacity, a visible emissions evaluation (VEE) shall be conducted in accordance with 40 CFR 60 Appendix A, Method 9 for a period of not less than 6-minutes. If the average opacity exceeds 10%, modifications and/or repairs shall be performed to correct the problem and the corrective measures shall be recorded. If such corrective action fails to remedy the opacity problem, a VEE in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be performed for a period of at least 18 minutes to determine compliance with the opacity limit specified in Condition V.A.2 of this permit. The visible emissions observer shall be Method 9 certified.
 - (9 VAC 5-80-110 K)
- 2. A record of each visible emissions observation shall be maintained and shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer.
 - (9 VAC 5-80-110 K)
- C. Compliance Assurance Monitoring (CAM) Requirements
 - The permittee shall monitor, operate, calibrate and maintain the baghouses CD-BH1, CD-BH2, CD-BH3, and CD-BH4 controlling the woodworking equipment according to the following:

Monitoring, Frequency,	Performance Criteria	Indicator Range; Averaging
Records		Period
Monitor each baghouse	Observe deviation from	Pressure drop from
pressure drop reading daily.	normal pressure drop of	instantaneous observation of
Record results daily.	0.2" w.c.< Dp < 9.5" w.c	magnehelic gauge or
		equivalent is no more than
		10% below 0.2" w.c.< Dp <
		9.5" w.c.

For each baghouse, perform baghouse inspections, when pressure drop is outside the indicator range. Internal baghouse, fabric filter, and ductwork inspection as required to alleviate any flow problems.	Inspections by a qualified employee with at least one year of experience in maintenance of mechanical equipment.	As noted above.
For each baghouse, keep maintenance logs of all maintenance activities as required by manufacturer's specifications; conduct annual maintenance activity.	A qualified employee with at least one year of experience in maintenance of mechanical equipment.	Logs maintained and available for inspection on a daily basis or as requested.

(9 VAC 5-80-110 and 40 CFR 64)

- The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
 (9 VAC 5-80-110, 9 VAC 5-80-490 E and 40 CFR 64.6 (c))
- 3. At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
 - (9 VAC 5-80-110, 9 VAC 5-80-490 E and 40 CFR 64.7 (b))
- 4. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the woodworking equipment is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
 - (9 VAC 5-80-110, 9 VAC 5-80-490 E and 40 CFR 64.7 (c))
- 5. Upon detecting an excursion or exceedance, the permittee shall restore operation of the woodworking equipment (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or

malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable. (9 VAC 5-80-110, 9 VAC 5-80-490 E and 40 CFR 64.7 (d)(1))

Determination that acceptable procedures were used in response to an excursion
or exceedance will be based on information available, which may include but is not
limited to, monitoring results, review of operation and maintenance procedures and
records, and inspection of the control device, associated capture system, and the
process.

(9 VAC 5-80-110, 9 VAC 5-80-490 E and 40 CFR 64.7(d)(2))

7. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Southwest Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(9 VAC 5-80-110, 9 VAC 5-80-490 E and 40 CFR 64.7(e))

- 8. If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the woodworking equipment for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
 - a. Improved preventative maintenance practices;
 - b. Process operation changes;
 - c. Appropriate improvements to control methods;
 - d. Other steps appropriate to correct control performance; and
 - e. More frequent or improved monitoring.

(9 VAC 5-80-110, 9 VAC 5-80-490 E and 40 CFR 64.8(a) and (b))

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Regulated Pollutant	Reference Method
PM/PM ₁₀	EPA Methods 5, 17

(9 VAC 5-80-110)

VI. Gluing Operations (Emission Unit ID No.'s ST1-G1 & ST2-G2)

A. Limitations

- 1. Particulate and PM₁₀ emissions from the wood-coating spray booth (SB-100) and the two Virginia Blower glue spray booths (ST1-G1 & ST2-G2) shall be controlled by fiberglass filters or equivalent. The filter systems shall be provided with adequate access for inspection and shall be in operation when the spray booths are in operation.
 - (9 VAC 5-50-260, 9 VAC 5-80-110 B, 9 VAC 5-80-1180 and Condition 2 of the NSR permit issued November 18, 2005)
- The production of veneer through the glue spray booths (ST1-G1 & ST2-G2) shall not exceed 15,750,000 board feet per year.
 (9 VAC 5-80-10 H, 9 VAC 5-80-110 B, and Condition 7 of the NSR permit issued November 18, 2005)
- The two Virginia Blower glue spray booths (ST1-G1 & ST2-G2) shall consume no more than 12.5 pounds per hour and 13 tons per year of Borden TS-44(F) UF resin powder (as mixed in aqueous compound) or equivalent.
 (9 VAC 5-80-10 H, 9 VAC 5-80-110 B, and Condition 8 of the NSR permit issued November 18, 2005)
- Visible emissions from the two Virginia Blower glue spray booth exhaust stacks (E-1 & E-2) shall not exceed 5 percent opacity for each stack.
 (9 VAC 5-50-260, 9 VAC 5-80-110 B, and Condition 14 of the NSR permit issued November 18, 2005)

B. Monitoring and Recordkeeping

1. The permittee shall perform visible emission observations on the Virginia Blower glue spray booths (ST1- G1 & ST2-G2). The visible emissions observations shall be conducted at least once each week during periods of normal facility operation for a sufficient time period to determine the presence of any visible emissions. If no visible emissions are observed, no action shall be required. However, if visible emissions are observed, a visible emissions evaluation (VEE) shall be conducted in accordance with 40 CFR 60 Appendix A, Method 9 for a period of not less than 6-minutes. If the average opacity exceeds 5%, modifications and/or repairs shall be performed to correct the problem and the corrective measures shall be recorded. If

such corrective action fails to remedy the opacity problem, a VEE in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be performed for a period of at least 18 minutes to determine compliance with the opacity limit specified in Condition VI.A.4 of this permit. The visible emissions observer shall be Method 9 certified.

(9 VAC 5-80-110 K)

2. A record of each visible emissions observation shall be maintained and shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer.

(9 VAC 5-80-110 K)

3. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to: the production of veneer; the hours of operation of the glue spray booths (ST1-G1 & ST2-G2); the consumption of Borden TS-44(F) UF resin powder, or equivalent; and the pollutant specific emission factors (F-factors) and equations used to calculate actual emission rates from the gluing operations. Hourly throughput and emissions shall be calculated by dividing the total daily throughput by the corresponding hours of booth operation. Annual throughput and emissions shall be calculated monthly as the sum of each consecutive 12 month period. These records shall be kept on file for the most current five (5) year period and shall be available on site for inspection by DEQ personnel.

(9 VAC 5-50-50, 9 VAC 5-80-110 B, and Condition 17 of the NSR permit issued November 18, 2005)

C. Testing

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Regulated Pollutant	Reference Method
VOC	EPA Methods 18, 25, 25a

(9 VAC 5-80-110)

VII. MACT Requirements – Veneer Face Manufacturing Operations

The Maximum Achievable Control Technology (MACT) Standard for plywood and composite wood manufacturers, under 40 CFR 63, Subpart DDDD (National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Products), was promulgated on June 30, 2004, and is applicable to this facility per 40 CFR 63.2231. This facility has kilns and presses and performs veneer face manufacturing operations.

A. Requirements

- 1. The permittee shall comply with the compliance options, operating requirements, and work practice requirements for existing sources no later than October 1, 2008. (9 VAC 5-80-110 and 40 CFR 63.2233 (b))
- 2. The permittee shall meet the notification requirements according to the schedule in 40 CFR 63.2280 and according to 40 CFR part 63, subpart A. Some of the notifications must be submitted before you are required to comply with the compliance options, operating requirements, and work practice requirements in this subpart.

(9 VAC 5-80-110 and 40 CFR 63.2233 (d))

VIII. Finishing Operations (Emission Unit ID No. F1)

A. Limitations

 Particulate matter (PM) emissions from each of the finishing spray booths (F1) shall not exceed its corresponding hourly emission rate as calculated using the following equation:

$$E = 4.10 * P^{0.67}$$

Where: E = PM emission rate, in lbs/hr P = Process weight rate in tons/hr (9 VAC 5-40-260 and 5-80-110)

Visible emissions from each finish coating spray booth exhaust (A, A1, B, D, J, K, M, N, P/Q, R/S, T, V, & Y) shall not exceed 20 percent opacity, except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).

(9 VAC 5-40-80 and 9 VAC 5-80-110)

3. The wood-coating spray booth (SB-100) shall not apply coatings that contain more than 8.5 lbs of volatile organic compounds (VOC) per gallon and not more than 8.5 lbs of solids per gallon, as applied.

- (9 VAC 5-80-1180, 9 VAC 5-80-110, and Condition 5 of NSR permit issued November 18, 2005)
- 4. The wood-coating spray booth (SB-100) shall not apply more than 100 gallons of coatings per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 (9 VAC 5-80-1180, 9 VAC 5-80-110, and Condition 6 of NSR permit issued November 18, 2005)
- Visible emissions from the wood-coating spray booth (SB-100) shall not exceed 5 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).
 (9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-80-110, and Condition 13 of NSR permit issued November 18, 2005).

B. Monitoring and Recordkeeping

- 1. The permittee shall perform visible emission observations on each of the spray booth exhaust stacks (A, A1, B, D, J, K, M, N, P/Q, R/S, T, V, Y, and SB-100). The visible emissions observations shall be conducted at least once each week during periods of normal facility operation for a sufficient time period to determine the presence of any visible emissions. If visible emissions do not appear to exceed ten percent (10%) opacity (5% opacity for SB-100), no action shall be required. However, if the observed visible emissions appear to exceed 10% opacity (5% opacity for SB-100), a visible emissions evaluation (VEE) shall be conducted in accordance with 40 CFR 60 Appendix A, Method 9 for a period of not less than 6minutes. If the average opacity exceeds 10% (5% opacity for SB-100), modifications and/or repairs shall be performed to correct the problem and the corrective measures shall be recorded. If such corrective action fails to remedy the opacity problem, a VEE in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be performed for a period of at least 18 minutes to determine compliance with the opacity limit specified in Condition VIII.A.2 of this permit. The visible emissions observer shall be Method 9 certified. (9 VAC 5-80-110 K)
- A record of each visible emissions observation shall be maintained and shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer.

(9 VAC 5-80-110 K)

- 3. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:
 - a. The results of the opacity checks and any VEE's conducted on the finish coating spray booths (F1 and SB-100);
 - b. A material safety data sheet (MSDS), or certified product data sheet, for each coating applied in the spray booths (F1 and SB-100);
 - c. The monthly consumption of each coating in the spray booths (F1 and SB-100);
 - d. VOC and solids content of coatings sprayed in Booth SB-100;
 - e. The total weight of furniture processed through the spray booths (F1 and SB-100) during each monthly period; and
 - f. The total monthly hours of operation of the furniture production line.

These records shall be kept on file for the most current five (5) year period and shall be available on site for inspection by DEQ personnel. (9 VAC 9 VAC 5-80-110)

C. Testing

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Regulated Pollutant	Reference Method
PM	EPA Method 5
VOC	EPA Methods 18, 25, 25a

(9 VAC 5-80-110)

IX. MACT Conditions - Finishing Operations

Except as specified in this permit, the facility is to be operated in compliance with Federal requirements under 40 CFR Part 63, Subpart JJ and 40 CFR Part 63, Subpart A, as identified in Table 1 for Subpart JJ.

(9 VAC 5-170-160, 40 CFR 63.800, and 40 CFR 63 Subpart A)

A. Emission Standard

Volatile Hazardous Air Pollutant (VHAP) emissions from the facility shall not exceed the following limits;

- 1. For finishing operations use any of the following methods;
 - Achieve a weighted average VHAP content across all coatings of 1.0 lb VHAP/lb solids, as applied;
 - b. Use compliant finishing materials that meet the following specifications:
 - i. Each sealer and topcoat has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
 - ii. Each stain has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
 - iii. Each thinner contains no more than 10.0 percent VHAP by weight except where excluded by (5) of this sub- section;
 - iv. Each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
 - v. Each washcoat, basecoat, and enamel that is formulated onsite is formulated using a finishing material containing no more than 1.0 lb VHAP/lb solids and a thinner containing no more than 3.0 percent VHAP by weight;
 - c. Use any combination of averaging, compliant coatings, and control device such that no greater than 1.0 lb of VHAP is emitted per lb of solids used;
- 2. For cleaning operations strippable spray booth coatings shall be used that contain no more than 0.8 lb VOC/lb solids, as applied;
- 3. For contact adhesive operations compliant contact adhesives shall be used based on the following criteria:
 - a. For aerosol adhesives, as well as hot melt, PVA, and urea-formaldehyde adhesives, and for contact adhesives applied to nonporous substrates there is no limit on the VHAP content of these adhesives;
 - b. For foam adhesives used in products that meet flammability requirements the VHAP content can be no more than 1.8 lbs VHAP/lb solids, as applied:
 - c. For all other contact adhesives the VHAP content can be no more than 1.0 lb VHAP/lb solids, as applied.

(9 VAC 5-170-160 and 40 CFR 63.802)

B. Continuous Compliance

Continuous compliance with the VHAP emissions limits shall be determined as follows (see Conditions IX.G and IX.H for content and timing of report submissions and signature requirements):

1. For finishing operations when averaging is being used to show continuous compliance, the permittee shall submit the results of the averaging calculation

(Equation 1) for each month within that semiannual period and submitting a compliance certification with the semiannual report. The compliance certification shall state that the value of (E), as calculated by Equation 1, is no greater than 1.0. The facility is in violation of the standard if E is greater than 1.0 for any month. A violation of the monthly average is a separate violation of the standard for each day of operation during the month, unless the affected source can demonstrate through records that the violation of the monthly average can be attributed to a particular day or days during the period.

$$E = (M_{c1}C_{c1} + M_{c2}C_{c2} + ... + M_{cn}C_{cn} + S_1W_1 + S_2W_2 + ... S_nW_n)/(M_{c1} + M_{c2} + ... + M_{cn})$$
 (Equation 1)

E = the emission limit achieved by an emission point or a set of emission points, in lb VHAP/lb solids. Mc = the mass of solids in a finishing material or coating (c) used monthly, including exempt finishing materials and coatings, lb solids/month.

Cc = the VHAP content of a finishing material or coating (c), in pounds of VHAP per pound of coating solids

S = the VHAP content of a solvent, expressed as a weight fraction, added to finishing materials or coatings.

W = the amount of solvent, in pounds, added to finishing materials and coatings during the monthly averaging period.

The emission limit (E in lb VHAP / lb solids) equals the sum, for all finishing materials and coatings, of the mass of solids in each material used within that month (M_c in lb solids / month) multiplied by the VHAP content in each material (C_c in lb VHAP / lb solids) plus the sum, for all solvents, of the mass of solvent used monthly (W in lb solvent / month) multiplied by the weight fraction of VHAP in the solvent (S in lb VHAP / lb solvent), with this total being divided by the sum, for all finishing materials and coatings, of the mass of solids in each finishing material and coating used within that month (M_c in lb solids / month).

- 2. For finishing operations when compliant coatings are being used to show continuous compliance, the permittee shall use compliant coatings and thinners, maintain records that demonstrate the finishing materials and thinners are compliant, and submit a compliance certification with the semiannual report which states that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as stated in Condition IX.A, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. The facility is in violation of the standard whenever a noncompliant coating, as demonstrated by records or by a sample of the coating, is used.
- 3. For finishing operations when compliant coatings are being used to show continuous compliance and the coatings are being applied using continuous coaters the permittee shall demonstrate continuous compliance by either of the following:
 - a. Use compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records, use compliant thinners, and submit a compliance certification with the semiannual report which states that compliant coatings have been used each day in the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance. The facility is in

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violation of the standard whenever a noncompliant coating, as determined by records or by a sample of the coating, is used. Use of a noncompliant coating is a separate violation for each day the noncompliant coating is used.

- b. Use compliant coatings, as determined by the VHAP content of the coating in the reservoir, use compliant thinners, maintain a viscosity of the coating in the reservoir that is no less than the viscosity of the initial coating by monitoring the viscosity with a viscosity meter or by testing the viscosity of the initial coating and retesting the coating in the reservoir each time solvent is added, maintain records of solvent additions, and submit a compliance certification with the semiannual report which states that compliant coatings, as determined by the VHAP content of the coating in the reservoir, have been used each day in the semiannual reporting period. Additionally, the certification shall state that the viscosity of the coating in the reservoir has not been less than the viscosity of the initial coating, that is, the coating that is initially mixed and placed in the reservoir, for any day in the semiannual reporting period. The facility is in violation of the standard when a sample of the as-applied coating exceeds the applicable limit, as determined using EPA Method 311, or the viscosity of the coating in the reservoir is less than the viscosity of the initial coating.
- 4. For contact adhesive operations when compliant adhesives are being used to show initial compliance the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that compliant contact and/or foam adhesives have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant contact and/or foam adhesives were used. Each day a noncompliant contact or foam adhesive is used is a single violation of the standard.
- 5. For strippable spray booth coatings the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that compliant strippable spray booth coatings have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant materials were used. Each day a noncompliant strippable booth coating is used is a single violation of the standard.
- 6. For work practice standards the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that the work practice implementation plan is being followed, or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented. During any period of time that the permittee is required to implement the provisions of the plan, each failure to implement an obligation under the plan during any particular day is a violation and the Administrator may require the permittee to modify the plan (see Condition IX.E.1).
- (9 VAC 5-170-160 and 40 CFR 63.804.(g) & 40 CFR 63.8)

C. Submittals

All submittals to the Administrator shall be sent to the Director, Southwest Regional Office and to EPA Region III at the following address:

EPA Region III
Air Protection Division
Attn: Wood Furniture NESHAPS Coordinator
1650 Arch Street
Philadelphia, PA 19103-2029

Copies of all submittals shall also be sent to the Southwest Regional Office. (9 VAC 5-170-160 and 40 CFR 63.13)

D. Operation and Maintenance

The permittee shall meet the following operation and maintenance requirements:

- 1. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.
- 2. Malfunctions shall be corrected as soon as practicable after their occurrence.
- Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.
- 4. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

E. Work Practice Standards

The permittee shall develop and implement the following work practice standards:

1. Work practice implementation plan - The permittee shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for the finishing and gluing operations and addresses each of the work practice standards presented in Conditions IX.E.2 through IX.E.12 that follow. The plan shall be developed no more than 60 days after the compliance date. The written work practice implementation plan shall be available for inspection by the Administrator upon request. If the Administrator determines that the work practice

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implementation plan does not adequately address each of the topics specified in §63.803 of Subpart JJ or that the plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the Administrator may require the permittee to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit.

- 2. Operator training course The permittee shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment in these operations, or implementation of the requirements of Subpart JJ. All new personnel shall be trained upon hiring. All existing personnel shall be trained within six months of the compliance date. All personnel shall be given refresher training annually. The permittee shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:
 - a. A list of all current personnel by name and job description that are required to be trained;
 - b. An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;
 - c. Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes; and
 - d. A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.
- 3. <u>Inspection and maintenance plan</u> The permittee shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:
 - a. A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic HAP solvents;
 - b. An inspection schedule;
 - c. Methods for documenting the date and results of each inspection and any repairs that were made;
 - d. The timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:
 - i. A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and

- ii. Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within three months.
- 4. <u>Cleaning and washoff solvent accounting system</u> The permittee shall develop an organic HAP solvent accounting form to record:
 - a. The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in §63.801 of Subpart JJ;
 - b. The number of pieces washed off, and the reason for the washoff; and
 - c. The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.
- 5. <u>Chemical composition of cleaning and washoff solvents</u> The permittee shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 of Subpart JJ (see attached), in concentrations subject to MSDS reporting as required by OSHA.
- 6. <u>Spray booth cleaning</u> The permittee shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the permittee shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.
- 7. <u>Storage requirements</u> The permittee shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.
- 8. <u>Application equipment requirements</u> The permittee shall use conventional air spray guns to apply finishing materials only under any of the following circumstances:
 - To apply finishing materials that have a VOC content no greater than 1.0 lb VOC/lb solids, as applied;
 - b. For touchup and repair under the following conditions:
 - The touchup and repair occurs after completion of the finishing operation;
 or

- ii. The touchup and repair occurs after the application of stain and before the application of any other type of finishing material, and the materials used for touchup and repair are applied from a container that has a volume of no more than 2.0 gallons.
- c. When spray is automated, that is, the spray gun is aimed and triggered automatically, not manually;
- d. When emissions from the finishing application station are directed to a control device;
- e. The conventional air gun is used to apply finishing materials and the cumulative total usage of that finishing material is no more than 5.0 percent of the total gallons of finishing material used during that semiannual period; or
- f. The conventional air gun is used to apply stain on a part for which it is technically or economically infeasible to use any other spray application technology. The permittee shall demonstrate technical or economic infeasiblity by submitting to the Administrator a videotape, a technical report, or other documentation that supports the permittee's claim of technical or economic infeasiblity. The following criteria shall be used, either independently or in combination, to support the permittee's claim of technical or economic infeasiblity:
 - The production speed is too high or the part shape is too complex for one operator to coat the part and the application station is not large enough to accommodate an additional operator; or
 - ii. The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.
- 9. <u>Line cleaning</u> The permittee shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.
- 10. <u>Gun cleaning</u> The permittee shall collect all organic HAP solvent used to clean spray guns into a normally closed container.
- 11. <u>Washoff operations</u> The permittee shall control emissions from washoff operations by:
 - a. Using normally closed tanks for washoff; and
 - b. Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.
- 12. <u>Formulation assessment plan for finishing operations</u> The permittee shall prepare and maintain with the work practice implementation plan a formulation assessment plan that:
 - a. Identifies VHAP from the list presented in Table 5 of Subpart JJ (see attached) that are being used in finishing operations;

- b. Establishes a baseline level of usage for each VHAP identified. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified, except for formaldehyde and styrene, which shall be determined as specified by §63.803 (I)(2). For VHAP's that do not have a baseline, one will be established according to Condition IX.E.12.d below.
- Tracks the annual usage of each VHAP identified that is present in amounts subject to MSDS reporting as required by OSHA.
- d. If the annual usage of the VHAP identified exceeds its baseline level, then the permittee of the facility shall provide a written notification to the Director, Southwest Regional Office and/or the Administrator that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:
 - i. The exceedance is no more than 15.0 percent above the baseline level;
 - ii. Usage of the VHAP is below the de minimis level presented in Table 5 for that VHAP;
 - iii. The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or
 - iv. The source of the pollutant is a finishing material with a VOC content of no more than 1.0 lb VOC/lb solids, as applied.
- e. If none of the explanations listed in Condition IX.E.12.d above is the reason for the increase, the permittee shall confer with the Director, Southwest Regional Office and/or the Administrator to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the Director, Southwest Regional Office and/or the Administrator and the owner or operator. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the owner or operator shall develop a plan to reduce usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.
- f. If the facility uses a VHAP of potential concern listed in Table 6 of Subpart JJ for which a baseline level has not been previously established, then the baseline level shall be established as the de minimis level provided in that same table. The permittee shall track the annual usage of each VHAP of potential concern identified that is present in amounts subject to MSDS reporting as required by OSHA. If usage of the VHAP of potential concern

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exceeds the de minimis level listed in Table 6 of Subpart JJ for that chemical, then the permittee shall provide an explanation to the Director, Southwest Regional Office and/or the Administrator that documents the reason for exceedance of the de minimis level. If the explanation is not one of those listed in Condition IX.E.12.d above, the affected source shall follow the procedures established in Condition IX.E.12.e above.

(9 VAC 5-170-160 and 40 CFR 63.803(a)-(I))

F. Recordkeeping

The permittee shall maintain records of the following:

- 1. For emission limit purposes the permittee shall maintain the following:
 - A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits in Subpart JJ,
 - The VHAP content, in lb VHAP/lb solids, as applied, of each finishing material and contact adhesive subject to the emission limits in Subpart JJ;
 and
 - c. The VOC content, in Ib VOC/Ib solids, as applied, of each strippable booth coating subject to the emission limits in Subpart JJ.
- 2. Following the averaging method the permittee shall maintain copies of the averaging calculation for each month following the compliance date, as well as the data on the quantity of coatings and thinners used that is necessary to support the calculation of E in Equation 1 in Section IX B.1.
- 3. Following the continuous coating operations, where viscosity is being used to determine compliance, the permittee shall maintain the records required by Condition IX.F.1 above as well as the following:
 - a. Solvent and coating additions to the continuous coater reservoir;
 - b. Viscosity measurements; and
 - c. Data demonstrating that viscosity is an appropriate parameter for demonstrating compliance.
- 4. The permittee shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:
 - a. Records demonstrating that the operator training program required by Condition IX.E.2 is in place;
 - b. Records collected in accordance with the inspection and maintenance plan required by Condition IX.E.3;

- c. Records associated with the cleaning solvent accounting system required by Condition IX.E.4;
- d. Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual period required by Condition IX.E.8;
- e. Records associated with the formulation assessment plan required by Condition IX.E.12; and
- f. Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.
- 5. The permittee shall maintain records of the compliance certifications submitted for each semiannual period following the compliance date.
- 6. The permittee shall maintain records of all other information submitted with the compliance status report and the semiannual reports.
- 7. The permittee shall maintain files of all information (including all reports and notifications) required, recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.
- (9 VAC 5-170-160 and 40 CFR 63.806 & 63.10(b)(1),(b)(2),& (c))

G. Notification of Compliance

Each time a notification of compliance status is required, the permittee shall submit to the Director, Southwest Regional Office and/or the Administrator, a notification of compliance status, signed by a responsible official of the company that owns or operates the facility who shall certify its accuracy, attesting to whether the source has complied with Subpart JJ. The notification shall list:

- 1. The methods that were used to determine compliance;
- 2. The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
- 3. The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;
- 4. The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified;

- 5. An analysis demonstrating whether the facility is a major source or an area source (using the emissions data generated for this notification);
- A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and
- 7. A statement by the permittee as to whether the facility has complied with Subpart JJ as expressed in this permit.
- (9 VAC 5-170-160 and 40 CFR 63.9(h))

H. Reporting

Reporting not otherwise required by this permit shall consist of the following:

- The permittee when demonstrating initial compliance shall submit the compliance status report required by §63.9(h) and Condition IX.G no later than 60 days after the compliance date. The report shall include the information required by Condition IX.B.
- 2. The permittee when demonstrating continuous compliance shall submit a report covering the previous 6 months of wood furniture manufacturing operations:
 - a. The first report shall be submitted 30 calendar days after the end of the first 6-month period following the compliance date.
 - b. Subsequent reports shall be submitted 30 calendar days after the end of each 6-month period following the first report.
 - c. The semiannual reports shall include the information required by Condition IX.B, a statement of whether the facility was in compliance or noncompliance, and, if the facility was in noncompliance, the measures taken to bring the facility into compliance.
 - d. The frequency of the reports required by Condition IX.H.2 above shall not be reduced from semiannually regardless of the history of the owner's or operator's compliance status.
- 3. The permittee, when required to provide a written notification by Condition IX.E.12.d. for exceedance of a baseline level (§ 63.803(I)(4)), shall include in the notification one or more statements that explains the reasons for the usage increase. The notification shall be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred.
- (9 VAC 5-170-160 and 40 CFR 63.807 & 63.10(d)-(e))

X. Facility-Wide Limitations

A. Opacity

No owner or other person shall cause or permit to be discharged into the atmosphere

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from any affected facility any visible emissions which exhibit greater than 20% opacity, except for one six-minute period in any hour of not more than 60% opacity. Failure to meet these requirements due to the presence of water vapor shall not be seen as a violation.

(9 VAC 5-40-80 and 9 VAC 5-80-110)

B. Permit Modification or Revocation for Cause

This permit may be modified or revoked in whole or in part for cause, including, but not limited to, the following:

- 1. Violation of any terms or conditions of this permit;
- 2. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts:
- 3. A change in any condition that requires either a temporary or permanent reduction or elimination of a permitted discharge; or
- 4. Information that the permitted discharge of any pollutant poses a threat to human health, welfare, or the environment.
- (9 VAC 5-80-10 K and Condition 20 of the NSR permit issued November 18, 2005)

C. Equipment Maintenance and Operator Training

- 1. In order to minimize the duration and frequency of excess emissions due to malfunctions of process equipment or air pollution control equipment, the permittee shall:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance. These records shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
 - b. Maintain an inventory of spare parts that are needed to minimize the duration of air pollution control equipment breakdowns.
 - (9 VAC 5-50-20 E, 9 VAC 5-170-160, and Condition 22 of the NSR permit issued November 18, 2005)
- 2. Boiler emissions and pollution control equipment shall be controlled by proper operation and maintenance. The permittee shall have available written operating procedures for the related air pollution control equipment. Operators shall be trained in the proper operation of all such equipment and shall be familiar with the written operating procedures. These procedures shall be based on the manufacturer's recommendations, at minimum. The permittee shall maintain

records of training provided including names of trainees, date of training and nature of training.

(9 VAC 5-50-20 E, 9 VAC 5-170-160, and Condition 22 of the NSR permit issued November 18, 2005)

D. Testing

- The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Upon the request of the board, the owner shall provide, or cause to be provided, emissions testing facilities to include: adequate sampling ports; safe sampling platforms with safe access; and utilities for sampling and testing equipment.
 VAC 5-50-30 F. 9 VAC 5-40-30 F. and Condition 16 of the NSR permit issued
 - (9 VAC 5-50-30 F, 9 VAC 5-40-30 F, and Condition 16 of the NSR permit issued November 18, 2005)
- 2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Regulated Pollutant	Reference Method
VOC	EPA Methods 18, 25, 25a
NO_X	EPA Method 7
SO ₂	EPA Method 6
CO	EPA Method 10
PM/PM ₁₀	EPA Method 5
Visible Emissions	EPA Method 9

The Department and EPA have the authority to require testing not included in this permit, if necessary to determine compliance with an emission limit or standard. (9 VAC 5-80-110)

XI. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Pollutant Emitted (5-80-720 B.)
K1 – K6	Dry Kilns (5 w/ 55,000 bd.ft capacity & 1 w/ 78,000 bd.ft capacity)	VOC
S1	Wood Silo (boiler fuel)	PM / PM ₁₀
S2	Coal Silo (boiler fuel)	PM / PM ₁₀
PW	Parts Washer (Maintenance Shop)	VOC

Emission	Emission Unit	Pollutant Emitted		
Unit No.	Description	(5-80-720 B.)		
The citation regulatory for each of the insignificant activities is 9 VAC 5-80-720B – Insignificant due to emission levels.				

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

XII. Permit Shield and Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Activity
40 CFR 60.40c-48c	NSPS Subpart Dc Standards of Performance for Small Industrial-Commercial- Institutional Steam Generating Units	Applies to steam generating units constructed, modified, or reconstructed after June 9, 1989
9 VAC 5-40-300	Standard for Volatile Organic Compounds	Applies to facilities located in the Northern Virginia Emissions Control Area
9 VAC 5-40-310	Standard for Nitrogen Oxides	Applies to facilities located in the Northern Virginia Emissions Control Area

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-140)

XIII. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except any that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

- 1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
- 3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
- 4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- 5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
- (9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

- All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.

- b. The date(s) analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses.
- f. The operating conditions existing at the time of sampling or measurement. (9 VAC 5-80-110 F)
- Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (9 VAC 5-80-110 F)
- 3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than <u>March 1</u> and <u>September 1</u> of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
 - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - b. All deviations from permit requirements. For purposes of this permit, a "deviation" means any condition determined by observation, data from any monitoring protocol or any other monitoring which is required by the permit that can be used to determine compliance. Deviations include exceedances documented by continuous emission monitoring or excursions from control performance indicators documented through periodic or compliance assurance monitoring.

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to § 114(a)(3) and § 504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.

- 2. A description of the means for assessing or monitoring the compliance of the source with its emissions limitations, standards, and work practices.
- 3. The identification of each term or condition of the permit that is the basis of the certification.
- 4. The compliance status.
- 5. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- 6. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- 7. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00) U.S. Environmental Protection Agency, Region III 1650 Arch Street Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Southwest Regional Office, within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semiannual compliance monitoring report pursuant to general condition XIII.C.3. (9 VAC 5-80-110 F.2)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Southwest Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Southwest Regional Office.

(9 VAC 9 VAC 5-20-180, 9 VAC 5-80-110 B, and Condition 23 of the NSR permit issued November 18, 2005)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (9 VAC 5-80-110 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source

may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

L. Duty to Submit Information

- 1. The permittee shall furnish to the board, within a reasonable time, any information that the board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the board along with a claim of confidentiality. (9 VAC 5-80-110 G.6)
- 2. Any document (including reports) required in a permit condition to be submitted to the board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G. (9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.. (9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited, to the following:

- 1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- 2. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- 3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
- 4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and
- 5. The prompt removal of spilled or traced dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
- (9 VAC 5-40-90 or 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-40-20 E and 9 VAC 5-50-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80 Article 1.

(9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- 1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
 VAC 5-170-130, 9 VAC 5-80-110 K.2, and Condition 21 of the NSR permit issued November 18, 2005)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

- 1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- The permit shall be reopened if the administrator or the board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 3. The permit shall not be reopened by the board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request. (9 VAC 5-80-150 E)

T. Transfer of Permits

- 1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
- 2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
- 3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
- (9 VAC 5-80-160, 9 VAC 5-80-10 O, and Condition 25 of the NSR permit issued November 18, 2005)

U. Malfunction as an Affirmative Defense

- 1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the conditions of paragraph 2 are met.
- 2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification

fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

- 3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
- The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source. (9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The board may suspend, under such conditions and for such period of time as the board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations. (9 VAC 5-80-190 C and 9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. (9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substance subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F. (40 CFR Part 82, Subparts A - F)

Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150). (9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68. (40 CFR Part 68)

AA. Changes to Permits for Emissions Trading

No permit revision shall be required, under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (9 VAC 5-80-110 I)

BB. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- 1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
- 2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- 3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)